# SOFIA Education & Public Outreach

M. Bennett Astronomical Society of the Pacific

E. DeVore SETI Institute

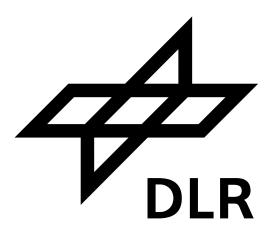
## SOFIA EPO Goal

 The purpose of the SOFIA Education and Public Outreach (EPO) program is to contribute to the improvement of the American public's scientific, mathematical, and technological literacy, and to public awareness and understanding of the importance and value of research in science.

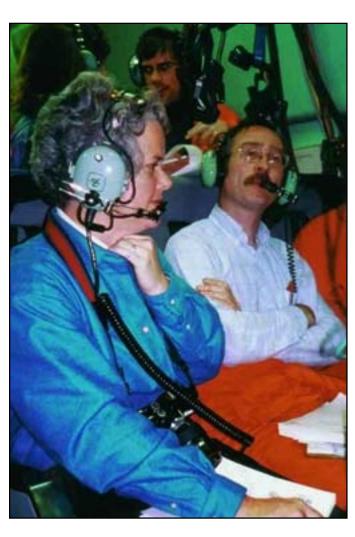
## **SOFIA Public Affairs**

- The USRA-SOFIA Education and Public Outreach team will work in close cooperation with the Office of Public Affairs at NASA Ames Research Center and at NASA Headquarters to effectively communicate the scientific, technological and educational achievements of the SOFIA program.
- The USRA-SOFIA Education and Public Outreach team will also work closely with DLR (the German Aerospace Center) to share education and public outreach materials and activities.





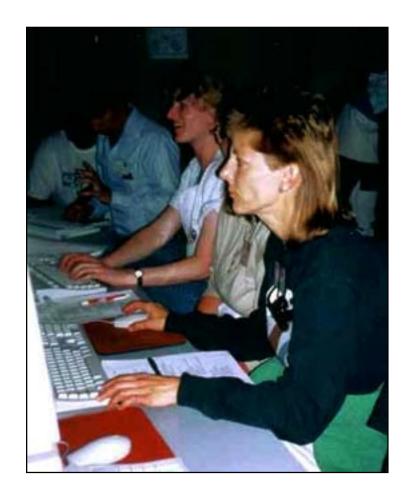
# SOFIA's EPO Flight Program



- Educators will fly onboard SOFIA to experience and participate in the scientific research experience
- Participants will include
  - -educator partners of Principal and General Investigators
  - -teacher teams, grades K-12
  - -community college instructors
  - -faculty of liberal arts, historically black, & other minority colleges
  - -museum and planetarium staff
  - -leaders of youth organizations & similar public groups
  - -selected high school and undergraduate students as team members with faculty
- Flight program supported by NASA's SOFIA EPO funding; sponsorship by industrial partners is being developed.

# **Educator Flight Training**

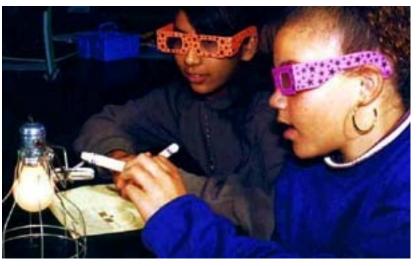
- Educator training will be provided via
  - -on-site institutes
  - -distance learning
  - -web-based courses
  - -workshops at regional colleges & universities lead by SOFIA-affiliated scientists
- Training will prepare educators for research flights, for classroom activities, and for communicating their experiences to other teachers and the public.
- Training will be supported by the SOFIA EPO program



# Education Partners Program

- SOFIA-affiliated volunteers
  (General and Principal
  Investigators, staff scientists,
  engineers, technicians, flight crew
  and others) will be matched with
  teachers and youth group leaders in
  their communities.
- Participants will be trained and work with their teacher partner
- Classroom and/or youth events conducted by the team will bring SOFIA people into the community
- Education Partners Program teachers may participate in SOFIA flights with their SOFIA partner





## Science Literacy & Education Program

- Science Literacy & Education Program (SLEP) participants will be key people who communicate the scientific & technological achievements of SOFIA to students & the public:
  - -science education faculty
  - -faculty who teach astronomy but are not SOFIA researchers
  - -NASA Aerospace Education Specialists
  - -informal educators from museums & planetaria
- SLEP institutes will be held at the SOFIA Science & Mission Operations Center
- Partnerships between SOFIA-affiliated scientists & science education faculty will be strongly encouraged



- •SLEP will work closely with USRA & NASA Space Grant affiliates to enhance the effectiveness of the program
- •Supported, in part, by NASA's EPO funds

## **EPO Internships**

- Interns will join the EPO team to support education, public outreach, and public affairs activities
- Interns may act as flight facilitators onboard SOFIA for EPO guests
- Internships will be 1-2 years.
- Participants are likely to be
  - -experienced educators
  - -graduate students in astronomy
  - -graduate students in science journalism & communication
  - -experienced planetarium & museum staff
  - -faculty on leave or sabbatical
  - -undergraduates from regional colleges through the NASA ARC internship program

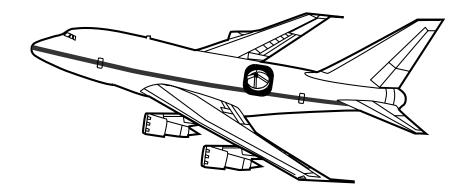


- EPO Internships will be offered when operations begin in 2002
- Interns will be supported, in part, by NASA SOFIA EPO funds

### Public Outreach

- SOFIA public outreach is aimed at either students or adults, and offers activities, programs, and materials to be used in public and informal educational settings.
- Outreach activities include:
  - -world wide web site
  - -exhibits at conferences programs & materials for planetarium, science center, & museum display
  - -project publications
  - -media, e.g., slides & videos
- Documentaries for television
- Events for scientists and educators at professional conferences, e.g., tours of the SOFIA observatory

- Events for the public, e.g., aircraft tours
- Public lecture series on SOFIArelated science and technology
- Open-house events at the SOFIA Science and Mission Operations Center (SSMOC)
- Tours of the SSMOC incooperation with the NASA Ames Research Center Office of Public Affairs



### SOFIA's EPO Team —

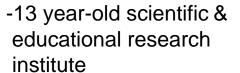
an alliance of experienced science & astronomy educators conducting SOFIA's Education and Public Outreach Program for NASA through Universities Space Research Association (USRA)

#### Astronomical Society of the Pacific



- -110 year old professional society
- -worldwide membership, astronomers, educators, & amateurs
- -chartered to bridge the gap between researchers, educators, & the public
- -astronomical publications for professionals, amateurs and the public
- -catalog of educational products
- -educator and astronomer training programs, e.g., Project ASTRO
- -non-profit organization

#### SETI Institute





- -35+ scientific research projects on
- -education projects
  - -airborne astronomy education:
  - FOSTER: Flight Opportunities for Science Teacher EnRichment on the

life in the universe including SETI

- Kuiper Airborne Observatory
- -curriculum development, e.g., "Life in the Universe" series; "Voyages Through Time" with NSF funding
- web site development & support
- -public outreach & events
- -non-profit organization

#### Stratospheric Observatory for Infrared Astronomy















Related Links

Visit SOFIA's web site at

http://sofia.arc.nasa.gov

- Register as a scientist
- Register as an educator



